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REMARKS

Claims 1 to 26 are pending. Claims 1 and 26 are currently amended. The amendments add no new matter to the application and are fully supported by the specification. The recitation that the previously applied composition comprises a perfluoropolyether siloxane is supported on page 6, lines 5 to 15 and page 8, line 29 to page 9, line 2. Page 12, lines 14 to line 30 supports the recitation that the perfluoropolyether siloxane has a molecular weight of at least 1000.

Rejections under 35 U.S.C. § 103

Claims 1, 2-8, 10-23, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Invie et al. (U.S. Patent No. 6,277,485 B1 hereinafter "US '485") in view of either Applicant's admitted prior art (AAPA) or Nippon Glass (JP 2002-187740 A hereinafter "JP '740"), in further view of Birch (U.S. Patent Application Publication 2004/0043142 A1 hereinafter "US '142"). Applicants respectfully submit that the pending claims are not obvious over this combination of references.

Although US '485 discloses the use of a plasma cleaner to remove impurities from antireflective coatings prior to the application of an antisoiling coating, this reference does not teach or suggest the removal of a perfluoropolyether siloxane having a molecular weight of at least 1000 from the surface of an antireflective coating. US '485 discloses that a plasma cleaner can be used to remove materials such as grease from the surface of antireflective glass. There is no teaching or suggestion that the plasma treatment could be extended to other types of materials, such as fluorinated materials that are chemically bonded to the surface of the substrate. That is, it is not obvious that that plasma conditions suitable for removal of grease from a surface would be suitable for removal of a perfluoropolyether siloxane having a molecular weight of at least 1000 and that is chemically bonded to the surface. There is no teaching or suggestion that the plasma treatment could be extended to removal of a perfluoropolyether siloxane from an antireflective coating without destruction of the antireflective coating.

Although both AAPA and JP '740 disclose that antisoiling coatings might need to be removed, there is no teaching or suggestion that perfluoropolyether siloxane coatings that are

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chemically bonded to the surface of an antireflective coating can be removed using a plasma unit. There is no discussion in either of these references as to any method that remotely resembles a plasma treatment.

Although US '142 discloses the removal of some fluorinated materials from a glass substrate using a plasma treatment, the fluorinated materials are not perfluoropolyether siloxanes. The only fluorinated material listed in Table II that contain silicon is the fluorosilane monolayer prepared from the precursor $\text{Cl}_3\text{Si}(\text{CH}_2)_2(\text{CF}_2)_7\text{CF}_3$. This precursor does not include a perfluoropolyether group. Further, the molecular weight of this precursor is about 580, which is significantly less than 1000 as claimed for the perfluoropolyether siloxanes. Additionally, the surface that is adjacent to the fluorinated material is glass rather than an antireflective coating.

It is not obvious from the combination of references that a different type of fluorinated material with a higher molecular weight could be removed from the surface of a substrate with a plasma treatment. It is not obvious from the combination of references that a perfluoropolyether siloxane that is chemically bonded to the surface of an antireflective coating can be removed with a plasma treatment. Further, it is not obvious from the combination of references that a perfluoropolyether siloxane could be removed from an antireflective coating without destruction of the antireflective coating. It is not obvious from the combination of references that a perfluoropolyether siloxane that is chemically bonded to the surface of an antireflective coating with an underlying polymeric substrate could be removed without destruction of the antireflective coating, the polymeric substrate, or both.

In summary, the combination of US '485, either AAPA or JP '740, and US '142 does not teach or suggest that a plasma treatment can be used for removal of an antisoiling coating containing a perfluoropolyether siloxane having a molecular weight of at least 1000 from the surface of an antireflective coating to which it is chemically bonded. Further, this combination does not suggest that that such a coating can be removed from an antireflective coating with an underlying polymeric substrate.

Applicants respectfully request withdrawal of the obviousness rejection over this combination of references.

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Claims 4 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US '485 in view of the Applicant's admitted prior art, in further view of US '142, and in further view of JP '740. Applicants respectfully submit that the pending claims are not obvious over this combination of references.

Claims 4 and 23 are both dependent on claims 1. For the same reasons discussed above for claim 1, this combination of references does not teach or suggest that a plasma treatment can be used for removing an antisoiling coating containing a perfluoropolyether siloxane having a molecular weight of at least 1000 from the surface of an antireflective coating to which it is chemically bonded. Further, this combination does not suggest that such a perfluoropolyether siloxane coating can be removed from an antireflective coating disposed on a polymeric optical substrate without destruction of the antireflective coating, the polymeric substrate, or both.

Applicants respectfully request withdrawal of the obviousness rejection over this combination of references.

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over US '485 in view either of the Applicant's admitted prior art or JP '740, in further view of US '142, and in further view of Patrick et al. (U.S. Patent No. 5,474,648 hereinafter "US '648"). Applicants respectfully submit that the pending claims are not obvious over this combination of references.

Claim 3 is dependent on claim 1. US '648 does not remove the deficiencies noted above for combination of US'485, AAPA or JP '740, and US '142. US '648 is directed to improving the dynamic control and radio frequency power in plasma process systems. US '648 alone or in combination with the other cited references provides no teaching or suggestion that a plasma treatment can be used to remove an antisoiling coating containing a perfluoropolyether siloxane having a molecular weight of at least 1000 and that is chemically bonded to the antireflective coating. Further, this combination does not suggest that such a perfluoropolyether siloxane coating can be removed from an antireflective coating disposed on an underlying polymeric optical substrate without destruction of the antireflective coating, the polymeric substrate, or both.

Applicants respectfully request withdrawal of the obviousness rejection over on this combination of references.

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Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US '485 in view either of the AAPA or JP '740, in further view of US '142, and in further view of Matsuo et al. (U.S. Patent No. 4,687,707 hereinafter "US '707"). Applicants respectfully submit that the pending claims are not obvious over this combination of references.

Claims 8 and 9 are both dependent on claim 1. For the same reasons discussed above for claim 1, claims 8 and 9 are not obvious over the combination of US '485, AAPA or JP '740, and US '142. US '707 does not remove the deficiencies noted above for this combination. US '707 describes the application of fluorinated materials to a substrate. There is no discussion in US '707 related to the removal of such a coating from a substrate using a plasma treatment method. The only discussion of a plasma treatment in US '707 relates to an activation treatment of a polymeric substrate. The activation treatment does not involve the removal of a previously applied perfluoropolyether siloxane-containing coating. Rather, the activation treatment is to improve the surface properties of the polymeric substrate.

Thus, the combination of references provides no teaching or suggestion that a plasma treatment can be used to remove an antisoiling coating containing a perfluoropolyether siloxane having a molecular weight of at least 1000 and that is chemically bonded to an antireflective coating. Further, this combination does not suggest that such a coating can be removed from an antireflective coating disposed on an underlying polymeric optical substrate without destruction of the antireflective coating, the polymeric substrate, or both.

Applicants respectfully request withdrawal of the obviousness rejection over this combination of references.

Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over US '485 in view either of the AAPA or JP '740, in further view of US '142, and in further view of Goodwin (U.S. Patent No. 5,707,740 hereinafter "US '740"). Applicants respectfully submit that the pending claims are not obvious over this combination of references.

Claim 24 is dependent on claim 1. For the reasons described above, claim 1 is not obvious over the combination of US '485, AAPA or JP '740, and US '142. Although US '740 may teach certain aspects of the dependent claims, US '740 does not remove the deficiencies of

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this combination of references regarding the independent claim. US '740 describes a method of improving the durability of a water repellent film over a substrate. There is no discussion of the removal of a perfluoropolyether siloxane from the surface of an antireflective coating with a plasma treatment.

Thus, the combination of references provides no teaching or suggestion that a plasma treatment can be used to remove an antisoiling coating containing a perfluoropolyether siloxane having a molecular weight of at least 1000 that is chemically bonded to an antireflective coating. Further, this combination does not suggest that such a coating can be removed from an antireflective coating on an underlying polymeric optical substrate without destruction of the antireflective coating, the polymeric substrate, or both.

Applicants respectfully request withdrawal of the obviousness rejection over this combination of references.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. Allowance of claims 1 to 26, as amended, at an early date is solicited.

Respectfully submitted,

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Date

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